

CLAIMS

1. Method of improving the performance of a mobile radiocommunication system, in which method a network element, known as the first network element, transmitting to mobile terminals, receives at least one
5 information element from at least one other network element, known as the second network element, said information element indicating the initial transmission power for transmission to a mobile terminal, in the case of radio link reconfiguration between said first network element and said mobile terminal, which can produce a change in the transmission power
10 for this radio link.
2. Method according to claim 1, in which said first network element corresponds to a base station, or node B in a UMTS type system.
3. Method according to claim 1 or 2, in which said second network element corresponds to a base station controller, or radio network
15 controller (RNC) in a UMTS type system.
4. Method according to one of claims 1 to 3, in which said second network element corresponds to a network element having a function for controlling communication with said mobile terminal, including a radio link reconfiguration control function, in particular, in a UMTS type system,
20 a radio network controller or RNC having an SRNC (Serving Radio Network Controller) role.
5. Method according to one of claims 1 to 4, in which said second network element corresponds to a network element controlling said first network element, in particular, in a UMTS type system, a radio network controller
25 or RNC controlling a node B or having a CRNC (Controlling Radio Network Controller) role for this node B.
6. Method according to claims 4 and 5, in which, in particular in a UMTS type system, said information element indicating initial transmission power is transmitted from an RNC having an SRNC role and a CRNC role
30 for a node B, to this node B, according to the NBAP (Node B Application Part) protocol.
7. Method according to one of claims 1 to 4, in which said second network element corresponds to a network element not controlling said first network element, and said first network element receives said
35 information element indicating initial transmission power, from said

second network element, via a third network element controlling said first network element, in particular, in a UMTS type system, via a radio network controller or RNC having a DRNC (Drift Radio Network Controller) role.

- 5 8. Method according to claims 4 and 7, in which, in particular in a UMTS type system, said information element indicating initial transmission power is transmitted from an RNC having an SRNC role, to an RNC having a DRNC role and a CRNC role for a node B, according to the RNSAP (Radio Network Subsystem Application Part) protocol, then
10 retransmitted from this latter RNC to the node B, according to the NBAP (Node B Application Part) protocol.
9. Method according to one of claims 1 to 8, in which said information element is received in a radio link reconfiguration command message.
10. Method according to one of claims 1 to 9, in which said information
15 element is received in a synchronized radio link reconfiguration command message.
11. Method according to one of claims 1 to 9, in which said information element is received in an unsynchronized radio link reconfiguration command message.
- 20 12. Method according to one of claims 9 to 11, in which, in a UMTS type system, said radio link reconfiguration command message corresponds to a "radio link reconfiguration prepare" message.
13. Method according to one of claims 9 to 11, in which, in a UMTS type system, said radio link reconfiguration command message corresponds
25 to a "radio link reconfiguration request" message.
14. Method according to one of claims 1 to 13, in which said initial transmission power is used by said first network element for a radio admission control algorithm.
15. Method according to one of claims 1 to 13, in which said initial
30 transmission power is used by said first network element for a power control algorithm.
16. Network element, including means for implementing a method according to one of claims 1 to 15.
17. Base station controller (RNC₁), including means (1) for transmitting to a
35 base station (node B) at least one information element indicating the

initial transmission power for transmission to a mobile terminal (UE), in the case of radio link reconfiguration between said base station and said mobile terminal, which can produce a change in the transmission power for this radio link.

- 5 **18.** Base station controller (RNC₂), including means (4) for transmitting to a base station controller (RNC₃) at least one information element indicating the initial transmission power for transmission to a mobile terminal (UE), in the case of radio link reconfiguration between a base station and said mobile terminal, which can produce a change in the transmission power for this radio link.
- 10 **19.** Base station controller (RNC₃), including means (5) for receiving from a base station controller (RNC₂) at least one information element indicating the initial transmission power for transmission to a mobile terminal, in the case of radio link reconfiguration between a base station and said mobile terminal, which can produce a change in the transmission power for this radio link, and for retransmitting said information element to said base station.
- 15 **20.** Base station (node B) including means (2, 6) for receiving from a base station controller (RNC₁, RNC₃) at least one information element indicating the initial transmission power for transmission to a mobile terminal (UE), in the case of radio link reconfiguration between said base station and said mobile terminal, which can produce a change in the transmission power for this radio link.
- 20 **21.** Base station according to claim 20, including means (3, 7) for using said information element for a radio admission control algorithm.
- 25 **22.** Base station according to claim 20, including means (3, 7) for using said information element for a power control algorithm.
- 23.** Mobile radiocommunication system, including means for implementing a method according to one of claims 1 to 15.